Appendix G1 Cumulative Statistics on Exceedances

		Total No. recorded in this reporting month	Total No. recorded since project commencement
1-Hr TSP	Action	3	16
	Limit	0	1
24-Hr TSP	Action	0	0
	Limit	0	0

Appendix G2 Cumulative Statistics on Complaints, Notifications of Summons and Successful Prosecutions

Reporting Period	Cumulative Statistics			
	Complaints	Notifications of	Successful	
		Summons	Prosecutions	
This Reporting Month (December 2018)	0	0	0	
Total No. received since project commencement	0	0	0	

Email message Environmental Resources Management

To Ramboll Hong Kong Limited (ENPO)

25/F One Harbourfront, 18 Tak Fung Street,

From ERM- Hong Kong, Limited

Hung Hom, Hong Kong Telephone: (852) 2271 3113 Facsimile: (852) 2723 5660 E-mail: jasmine.ng@erm.com

Ref/Project number Contract No. HY/2017/10

Tuen Mun – Chek Lap Kok Link – Northern Connection Tunnel Buildings, Electrical and

Mechanical Works

Subject Notification of Exceedance for Air Quality

Impact Monitoring

Date 18 December 2018



Dear Sir/ Madam,

Please find attached the Notification of Exceedance (NOE) of the following Log no.:

Action Level Exceedance 0463091_9December2018_1hrTSP_Station ASR1

One (1) exceedance was recorded on 9 December 2018.

Regards,

Dr Jasmine Ng

Environmental Team Leader

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ERM-Hong Kong, Limited

CONTRACT NO. HY/2017/10 TUEN MUN - CHEK LAP KOK LINK NORTHERN CONNECTION TUNNEL BUILDINGS, ELECTRICAL AND MECHANICAL WORKS

Air Quality Impact Monitoring

Notification of Exceedance

Log No.	Action Level Exceedance			
O	0463091_9December2018_1hrTSP_Station ASR1			
	[Total No. of Exceedances = 1]			
Date		9 December 2018 (Measured)		
	18 Decem	aber 2018 (Results obtained from ENPO Website)		
Monitoring Station		ASR1, ASR5, ASR6, ASR10, AQMS1		
Parameter(s) with Exceedance(s)		1-hr TSP		
Action Levels	1-hr TSP (μg/m³) ASR1 = 331 ASR5 = 340 ASR6 = 338 ASR10 = 335 AQMS1 = 337			
Limit Levels	1-hr TSP (μg/m³)	500		
Measured Levels	Refer to the attached data shee	t.		
Works Undertaken (at	No works were undertaken un	der this Contract on 9 December 2018.		
the time of monitoring event)				
Possible Reason for	The exceedances are unlikely to	o be due to the Contract, in view of the following:		
Action or Limit Level	 According to information 	on provided by the Contractor, no construction works were		
Exceedance(s)	conducted on 9 Decemb	per 2018 under this Contract.		
	 According to ET's site inspection on 7 December 2018, no particular findings was observed at the works area near ASR1 (refer to ET's Site Inspection Photo). Unpaved roads at the works area were in wet condition. Based on the above, the exceedances are unlikely to be due to the Contract. 			
Actions Taken/To Be	The Contractor has been reminded to ensure all dust suppression measures are implemented at the			
Taken	site area including water spraying on unpaved roads. The ET will monitor for future trends in exceedances.			
Remarks	attached. The location of the	ecember 2018 and locations of air quality monitoring stations are works area under this Contract is attached. The attached wind data from Contract No. HY/2012/08 for reference.		

Results of Air Quality Monitoring

				Time (hh:mm,			
Project	Works	Date (yyyy-mm-dd)	Station	24hour)	Parameter	Results	Unit
TMCLKL	HY/2012/08	2018-12-09	AQMS1	8:52	1-hour TSP	79	ug/m³
TMCLKL	HY/2012/08	2018-12-09	AQMS1	9:54	1-hour TSP	57	ug/m ³
TMCLKL	HY/2012/08	2018-12-09	AQMS1	10:56	1-hour TSP	75	ug/m ³
TMCLKL	HY/2012/08	2018-12-09	ASR1	8:40	1-hour TSP	135	ug/m ³
TMCLKL	HY/2012/08	2018-12-09	ASR1	9:42	1-hour TSP	212	ug/m ³
TMCLKL	HY/2012/08	2018-12-09	ASR1	10:44	1-hour TSP	346	ug/m³
TMCLKL	HY/2012/08	2018-12-09	ASR10	8:05	1-hour TSP	74	ug/m ³
TMCLKL	HY/2012/08	2018-12-09	ASR10	9:07	1-hour TSP	79	ug/m³
TMCLKL	HY/2012/08	2018-12-09	ASR10	10:09	1-hour TSP	83	ug/m ³
TMCLKL	HY/2012/08	2018-12-09	ASR5	8:28	1-hour TSP	201	ug/m³
TMCLKL	HY/2012/08	2018-12-09	ASR5	9:30	1-hour TSP	194	ug/m ³
TMCLKL	HY/2012/08	2018-12-09	ASR5	10:32	1-hour TSP	194	ug/m ³
TMCLKL	HY/2012/08	2018-12-09	ASR6	8:16	1-hour TSP	134	ug/m ³
TMCLKL	HY/2012/08	2018-12-09	ASR6	9:18	1-hour TSP	97	ug/m³
TMCLKL	HY/2012/08	2018-12-09	ASR6	10:20	1-hour TSP	112	ug/m ³
TMCLKL	HY/2012/08	2018-12-09	AQMS1	11:58	24-hour TSP	35	ug/m³
TMCLKL	HY/2012/08	2018-12-09	ASR1	11:46	24-hour TSP	62	ug/m³
TMCLKL	HY/2012/08	2018-12-09	ASR10	11:09	24-hour TSP	40	ug/m³
TMCLKL	HY/2012/08	2018-12-09	ASR5	11:34	24-hour TSP	117	ug/m³
TMCLKL	HY/2012/08	2018-12-09	ASR6	11:22	24-hour TSP	53	ug/m³

Note: Indicates Exceedance of Action Level Indicates Exceedance of Limit Level

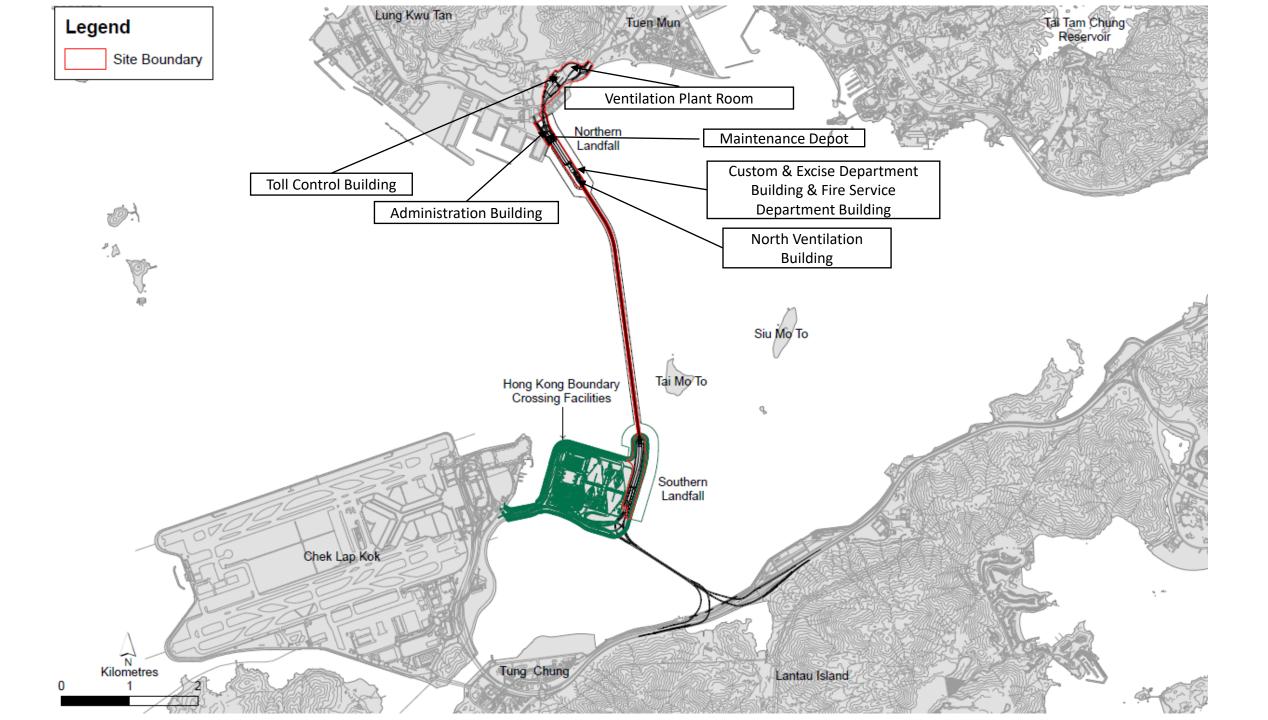
	Meteorological Data for Impact Monitoring in the reporting period*					
Date (yy-mm-dd)	Time (24hrs)	Average of Wind Speed (m/s)	Average of Wind Direction (degree)			
18/12/09	0:00	2.7	21			
18/12/09	1:00	3.1	34			
18/12/09	2:00	2.2	55			
18/12/09	3:00	2.2	39			
18/12/09	4:00	1.3	18			
18/12/09	5:00	1.3	56			
18/12/09	6:00	1.8	56			
18/12/09	7:00	1.8	38			
18/12/09	8:00	2.2	36			
18/12/09	9:00	2.7	14			
18/12/09	10:00	1.8	32			
18/12/09	11:00	0.9	43			
18/12/09	12:00	0.9	41			
18/12/09	13:00	1.3	348			
18/12/09	14:00	2.2	331			
18/12/09	15:00	3.1	326			
18/12/09	16:00	1.8	330			
18/12/09	17:00	1.3	13			
18/12/09	18:00	1.3	4			
18/12/09	19:00	1.8	18			
18/12/09	20:00	1.8	53			
18/12/09	21:00	0.9	336			
18/12/09	22:00	1.3	27			
18/12/09	23:00	1.3	44			

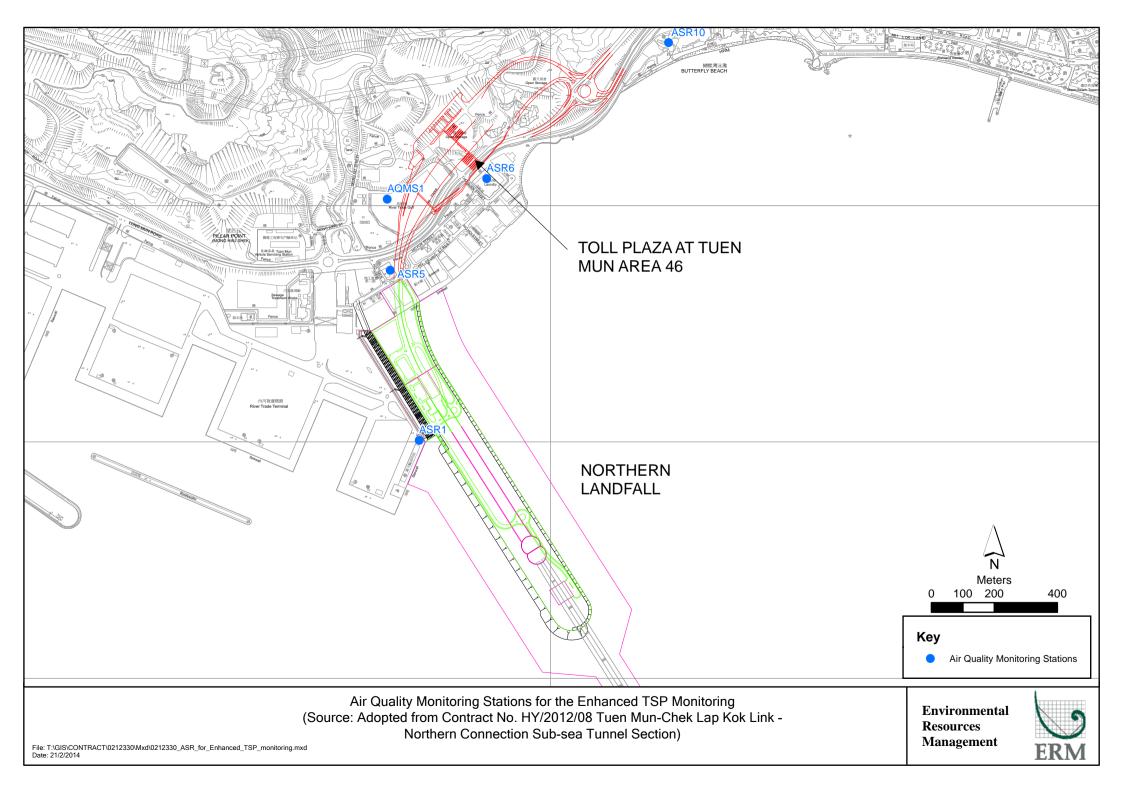
^{*}Wind data is sourced from Contract No. HY/2012/08 Tuen Mun - Chek Lap Kok Link - Northern Connection Sub-sea Tunnel Section

PHOTO BY ET ON 7 DECEMBER 2018

Photo 1 - Watering of unpaved roads at works area near Fire Services
Department Building to maintain a wet condition (7 December 2018)







Email message

To

Environmental Resources Management

Ramboll Hong Kong Limited (ENPO)

2507, 25/F One Harbourfront, 18 Tak Fung Street, Hung Hom, Hong Kong

From ERM- Hong Kong, Limited

Hung Hom, Hong Kong Telephone: (852) 2271 3113 Facsimile: (852) 2723 5660 E-mail: jasmine.ng@erm.com

Ref/Project number Contract No. HY/2017/10

Tuen Mun – Chek Lap Kok Link – Northern Connection Tunnel Buildings, Electrical and

Mechanical Works

Subject Notification of Exceedance for Air Quality

Impact Monitoring

Date 31 December 2018



Dear Sir/ Madam,

Please find attached the Notification of Exceedance (NOE) of the following Log no.:

<u>Action Level Exceedance</u> 0463091_12December2018_1hrTSP_Station ASR1

One (1) exceedance was recorded on 12 December 2018.

Regards,

Dr Jasmine Ng

Environmental Team Leader

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ERM-Hong Kong, Limited

CONTRACT NO. HY/2017/10 TUEN MUN - CHEK LAP KOK LINK NORTHERN CONNECTION TUNNEL BUILDINGS, ELECTRICAL AND MECHANICAL WORKS

Air Quality Impact Monitoring

Notification of Exceedance

Log No.		Action Level Exceedance		
	0463091_12December2018_1hrTSP_Station ASR1			
		[Total No. of Exceedances = 1]		
Date		12 December 2018 (Measured)		
	31 Dece	mber 2018 (Results obtained from ENPO Website)		
Monitoring Station		ASR1, ASR5, ASR6, ASR10, AQMS1		
Parameter(s) with Exceedance(s)		1-hr TSP		
Action Levels	1-hr TSP (μg/m³) ASR1 = 331 ASR5 = 340 ASR6 = 338 ASR10 = 335 AQMS1 = 337			
Limit Levels	1-hr TSP (μg/m³)	500		
Measured Levels	Refer to the attached data she	et.		
Works Undertaken (at		Contract on 12 December 2018 included:		
the time of monitoring	 Rebar fixing at Administ 	ration Building and Maintenance Depot.		
event)				
Possible Reason for		to be due to the Contract, in view of the following:		
Action or Limit Level	•	es of 1 hour-TSP (13:31 - 14:31) at ASR1, other 1hr-TSP levels and all		
Exceedance(s)		oring stations were in compliance with the Action and Limit Levels on		
	the same day.			
	Watering record provided by the Contractor was reviewed. Watering was maintained on			
	unpaved and dry road on 12 December 2018 (refer to Contractor's Photo and watering record).			
	No works under this Contract was conducted in the wind direction (north-westerly wind) division that time of succeedings.			
	during the time of exceedance. Resed on the above the exceedances are unlikely to be due to the Contract.			
Actions Taken / To Be	Based on the above, the exceedances are unlikely to be due to the Contract. The Contractor has been reminded to ensure all dust suppression measures are implemented at the			
Taken	site area including water spraying at unpaved road. The ET will monitor for future trends in			
	site area including water spraying at unpaved road. The E1 will monitor for future trends in exceedances.			
Remarks	The monitoring results on 12	December 2018 and locations of air quality monitoring stations are		
	attached. The location of the	e works area under this Contract is attached. The attached wind data		
	on 12 December 2018 is source	ed from Contract No. HY/2012/08 for reference.		

Results of Air Quality Monitoring

				Time (hh:mm,			
Project	Works	Date (yyyy-mm-dd)	Station	24hour)	Parameter	Results	Unit
TMCLKL	HY/2012/08	2018-12-12	AQMS1	13:41	1-hour TSP	95	ug/m3
TMCLKL	HY/2012/08	2018-12-12	AQMS1	14:43	1-hour TSP	79	ug/m3
TMCLKL	HY/2012/08	2018-12-12	AQMS1	15:45	1-hour TSP	95	ug/m3
TMCLKL	HY/2012/08	2018-12-12	ASR1	13:31	1-hour TSP	414	ug/m3
TMCLKL	HY/2012/08	2018-12-12	ASR1	14:33	1-hour TSP	174	ug/m3
TMCLKL	HY/2012/08	2018-12-12	ASR1	15:35	1-hour TSP	142	ug/m3
TMCLKL	HY/2012/08	2018-12-12	ASR10	13:00	1-hour TSP	112	ug/m3
TMCLKL	HY/2012/08	2018-12-12	ASR10	14:02	1-hour TSP	77	ug/m3
TMCLKL	HY/2012/08	2018-12-12	ASR10	15:04	1-hour TSP	80	ug/m3
TMCLKL	HY/2012/08	2018-12-12	ASR5	13:20	1-hour TSP	340	ug/m3
TMCLKL	HY/2012/08	2018-12-12	ASR5	14:22	1-hour TSP	171	ug/m3
TMCLKL	HY/2012/08	2018-12-12	ASR5	15:24	1-hour TSP	168	ug/m3
TMCLKL	HY/2012/08	2018-12-12	ASR6	13:10	1-hour TSP	230	ug/m3
TMCLKL	HY/2012/08	2018-12-12	ASR6	14:12	1-hour TSP	111	ug/m3
TMCLKL	HY/2012/08	2018-12-12	ASR6	15:14	1-hour TSP	106	ug/m3
TMCLKL	HY/2012/08	2018-12-12	AQMS1	16:47	24-hour TSP	73	ug/m3
TMCLKL	HY/2012/08	2018-12-12	ASR1	16:27	24-hour TSP	126	ug/m3
TMCLKL	HY/2012/08	2018-12-12	ASR10	16:06	24-hour TSP	69	ug/m3
TMCLKL	HY/2012/08	2018-12-12	ASR5	16:26	24-hour TSP	142	ug/m3
TMCLKL	HY/2012/08	2018-12-12	ASR6	16:16	24-hour TSP	93	ug/m3

Note: Indicates Exceedance of Action Level Indicates Exceedance of Limit Level

	Meteorological	Data for Impact Monitoring in	the reporting period*
Date (yy-mm-dd)	Time (24hrs)	Average of Wind Speed (m/s)	Average of Wind Director (degree)
18/12/12	0:00	1.8	313
18/12/12	1:00	1.8	282
18/12/12	2:00	1.8	297
18/12/12	3:00	1.8	306
18/12/12	4:00	1.8	316
18/12/12	5:00	0.9	348
18/12/12	6:00	1.3	281
18/12/12	7:00	1.3	55
18/12/12	8:00	1.8	295
18/12/12	9:00	1.3	298
18/12/12	10:00	1.8	19
18/12/12	11:00	1.3	344
18/12/12	12:00	0.9	321
18/12/12	13:00	1.3	347
18/12/12	14:00	2.2	304
18/12/12	15:00	1.3	306
18/12/12	16:00	1.8	322
18/12/12	17:00	1.8	303
18/12/12	18:00	0.9	289
18/12/12	19:00	0.9	327
18/12/12	20:00	1.3	3
18/12/12	21:00	0.9	260
18/12/12	22:00	1.8	18
18/12/12	23:00	1.8	40

^{*}Wind data is sourced from Contract No. HY/2012/08 Tuen Mun - Chek Lap Kok Link - Northern Connection Sub-sea Tunnel Section

PHOTO BY CONTRACTOR ON 12 DECEMBER 2018

Photo 1 - Watering of unpaved roads to maintain a wet condition

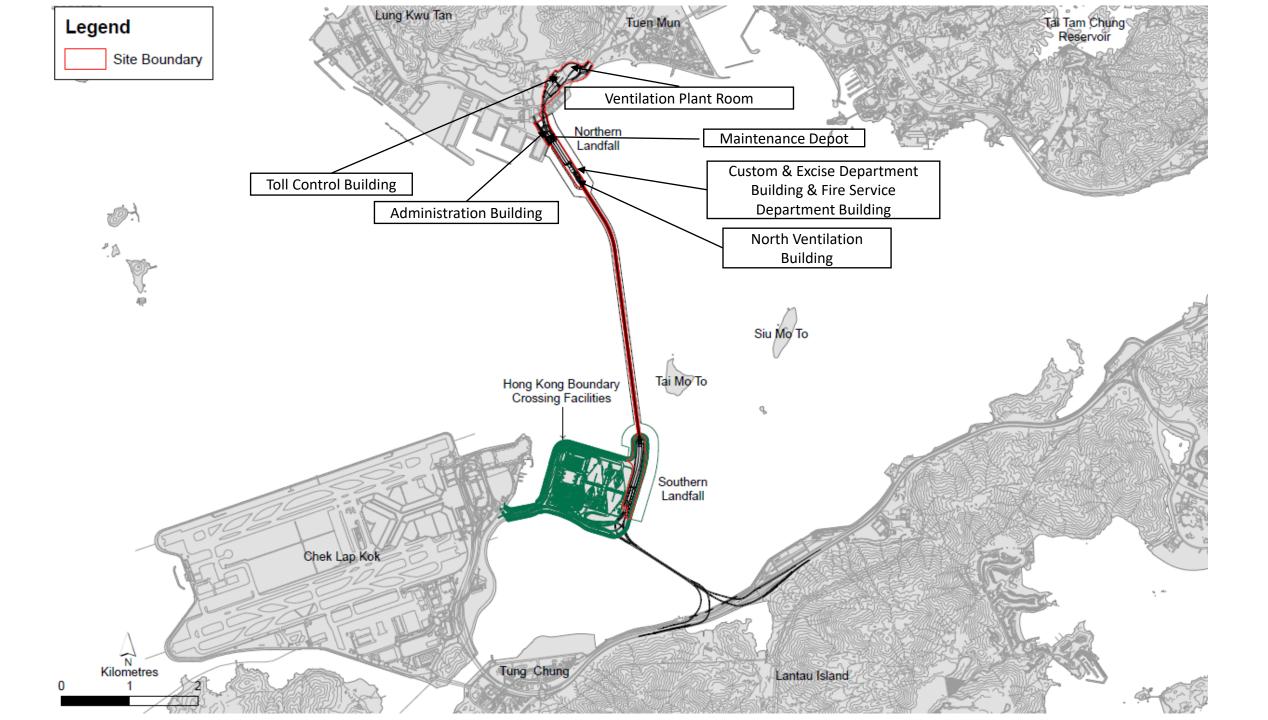


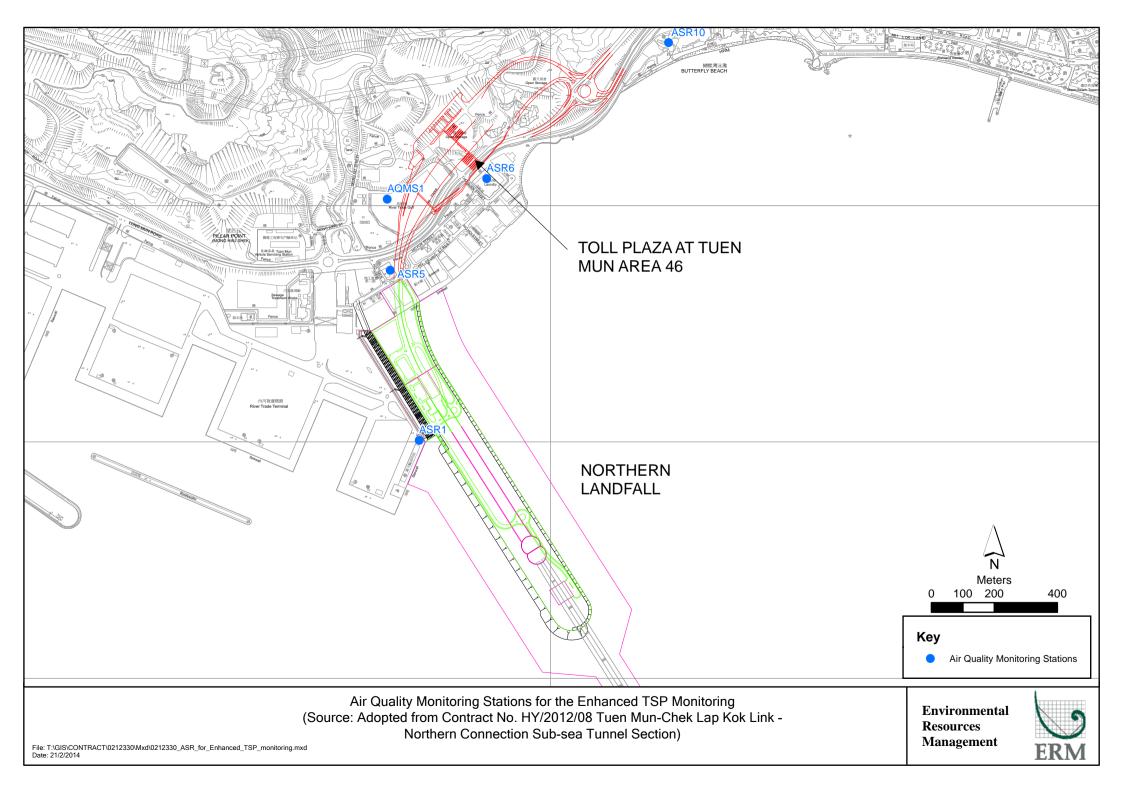
Photo 2 - Rebar fixing works conducted at works area of Administration Building and Maintenance Depot



WATERING RECORD ON 12 DECEMBER 2018

	Locat	flon:
12 Dec	Adh	& MD
Pertol	waterly .	Sign
7-8	7:55	me.
8-9	8:40	Orle
9-10	9:32	me
10-11	10:44	Mik
11-12	11:31	570
12-13	12:58	DUC.
13-14	13:51	Dile.
14-15	14:36	Dile.
15-16	15:37	DR
16-17	16=40	Me
17-18	17=50	Due
18-19	18:34	Da
The state of the s		





Email message

To

Environmental Resources Management

Ramboll Hong Kong Limited (ENPO)

2507, 25/F One Harbourfront, 18 Tak Fung Street, Hung Hom, Hong Kong

From ERM- Hong Kong, Limited

18 Tak Fung Street, Hung Hom, Hong Kong Telephone: (852) 2271 3113 Facsimile: (852) 2723 5660 E-mail: jasmine.ng@erm.com

Ref/Project number Contract No. HY/2017/10

Tuen Mun – Chek Lap Kok Link – Northern Connection Tunnel Buildings, Electrical and

Mechanical Works

Subject Notification of Exceedance for Air Quality

Impact Monitoring

Date 31 December 2018



Dear Sir/ Madam,

Please find attached the Notification of Exceedance (NOE) of the following Log no.:

Action Level Exceedance 0463091_18December2018_1hrTSP_Station ASR6

One (1) exceedance was recorded on 18 December 2018.

Regards,

Dr Jasmine Ng

Environmental Team Leader

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ERM-Hong Kong, Limited

CONTRACT NO. HY/2017/10 TUEN MUN - CHEK LAP KOK LINK NORTHERN CONNECTION TUNNEL BUILDINGS, ELECTRICAL AND MECHANICAL WORKS

Air Quality Impact Monitoring

Notification of Exceedance

Log No.		Action Level Exceedance		
	0463091_18December2018_1hrTSP_Station ASR6			
		[Total No. of Exceedances = 1]		
Date		18 December 2018 (Measured)		
	31 Dece	mber 2018 (Results obtained from ENPO Website)		
Monitoring Station		ASR1, ASR5, ASR6, ASR10, AQMS1		
Parameter(s) with Exceedance(s)		1-hr TSP		
Action Levels	1-hr TSP (μ g/m³) ASR1 = 331 ASR5 = 340 ASR6 = 338 ASR10 = 335 AQMS1 = 337			
Limit Levels	1-hr TSP (μg/m³)	500		
Measured Levels	Refer to the attached data she	et.		
Works Undertaken (at the time of monitoring event)		Contract on 18 December 2018 included: nd formwork at Toll Control Building (<i>refer to Contractor's photo</i>)		
Possible Reason for	The exceedances are unlikely	to be due to the Contract, in view of the following:		
Action or Limit Level	 Apart from exceedance 	es of 1 hour-TSP (14:16 - 15:16) at ASR6, other 1hr-TSP levels and all		
Exceedance(s)	24-hr TSP at all monito	oring stations were in compliance with the Action and Limit Levels on		
	the same day.			
	Watering record provided by the Contractor was reviewed. Watering was maintained on			
	unpaved and dry road on 18 December 2018 (refer to watering record).			
	No works under this Contract was conducted in the wind direction (easterly wind) upstream			
	of ASR6 during the time of exceedance.			
A () TE 1 (TE 1)	Based on the above, the exceedances are unlikely to be due to the Contract.			
Actions Taken / To Be	The Contractor has been reminded to ensure all dust suppression measures are implemented at the			
Taken	site area including water spraying at unpaved road. The ET will monitor for future trends in exceedances.			
Remarks	The monitoring results on 18	December 2018 and locations of air quality monitoring stations are		
	attached. The location of the	works area under this Contract is attached. The attached wind data		
	on 18 December 2018 is source	ed from Contract No. HY/2012/08 for reference.		

Results of Air Quality Monitoring

				Time (hh:mm,			
Project	Works	Date (yyyy-mm-dd)	Station	24hour)	Parameter	Results	Unit
TMCLKL	HY/2012/08	2018-12-18	AQMS1	13:49	1-hour TSP	118	ug/m3
TMCLKL	HY/2012/08	2018-12-18	AQMS1	14:51	1-hour TSP	188	ug/m3
TMCLKL	HY/2012/08	2018-12-18	AQMS1	15:53	1-hour TSP	151	ug/m3
TMCLKL	HY/2012/08	2018-12-18	ASR1	13:37	1-hour TSP	207	ug/m3
TMCLKL	HY/2012/08	2018-12-18	ASR1	14:39	1-hour TSP	113	ug/m3
TMCLKL	HY/2012/08	2018-12-18	ASR1	15:41	1-hour TSP	174	ug/m3
TMCLKL	HY/2012/08	2018-12-18	ASR10	13:03	1-hour TSP	126	ug/m3
TMCLKL	HY/2012/08	2018-12-18	ASR10	14:05	1-hour TSP	73	ug/m3
TMCLKL	HY/2012/08	2018-12-18	ASR10	15:07	1-hour TSP	106	ug/m3
TMCLKL	HY/2012/08	2018-12-18	ASR5	13:26	1-hour TSP	311	ug/m3
TMCLKL	HY/2012/08	2018-12-18	ASR5	14:30	1-hour TSP	193	ug/m3
TMCLKL	HY/2012/08	2018-12-18	ASR5	15:32	1-hour TSP	192	ug/m3
TMCLKL	HY/2012/08	2018-12-18	ASR6	13:14	1-hour TSP	224	ug/m3
TMCLKL	HY/2012/08	2018-12-18	ASR6	14:16	1-hour TSP	478	ug/m3
TMCLKL	HY/2012/08	2018-12-18	ASR6	15:18	1-hour TSP	123	ug/m3
TMCLKL	HY/2012/08	2018-12-18	AQMS1	16:55	24-hour TSP	88	ug/m3
TMCLKL	HY/2012/08	2018-12-18	ASR1	16:43	24-hour TSP	131	ug/m3
TMCLKL	HY/2012/08	2018-12-18	ASR10	16:09	24-hour TSP	66	ug/m3
TMCLKL	HY/2012/08	2018-12-18	ASR5	16:34	24-hour TSP	134	ug/m3
TMCLKL	HY/2012/08	2018-12-18	ASR6	16:20	24-hour TSP	94	ug/m3

Note: Indicates Exceedance of Action Level Indicates Exceedance of Limit Level

	Meteorological Data for Impact Monitoring in the reporting period*					
Date (yy-mm-dd)	Time (24hrs)	Average of Wind Speed (m/s)	Average of Wind Director (degree)			
18/12/18	0:00	1.3	339			
18/12/18	1:00	0.9	335			
18/12/18	2:00	0.4	50			
18/12/18	3:00	0.9	335			
18/12/18	4:00	0.9	56			
18/12/18	5:00	0.4	81			
18/12/18	6:00	0.9	81			
18/12/18	7:00	0.9	99			
18/12/18	8:00	1.3	83			
18/12/18	9:00	1.3	86			
18/12/18	10:00	1.3	35			
18/12/18	11:00	1.8	31			
18/12/18	12:00	1.3	130			
18/12/18	13:00	3.1	140			
18/12/18	14:00	3.6	103			
18/12/18	15:00	3.1	114			
18/12/18	16:00	4.0	132			
18/12/18	17:00	4.0	110			
18/12/18	18:00	2.7	84			
18/12/18	19:00	2.2	101			
18/12/18	20:00	1.8	36			
18/12/18	21:00	1.8	34			
18/12/18	22:00	1.8	43			
18/12/18	23:00	1.8	49			

 $[\]ast Wind$ data is sourced from Contract No. HY/2012/08 Tuen Mun - Chek Lap Kok Link - Northern Connection Sub-sea Tunnel Section

PHOTO BY CONTRACTOR ON 18 DECEMBER 2018

Photo 1 - Falsework, rebar fixing and formwork conducted at works area of Toll Control Building



WATERING RECORD ON 18 DECEMBER 2018

	Location:	
18th Der	Ado A MO	
Perloy	watering time	Sign
7-8		3 -
8-9	8:02	The
9-10	9=00 9250	TK
10-11	10:47	mc.
11-12	11:35	me
12-13	12:56	orce
13-14	13:30	OUR .
14-12/	14:00 14:51	DIC
15-16	15=38	-076
16-17	16=46	Ma
17-18	17=45	TH
18-19		11-81

